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King County
Department of Public Safety
James E. Montgomery, Sheriff-Director
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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Federal Communication Commission Office of Managing Director Washington D.C. 20554

RE: FCC Docket 92-235

Dear Director:

As a combined 9-1-1 Dispatch Center and a user of radio frequencies in the public safety spectrum, we are very concerned about the proposed FCC Docket 92-235.

King County Department of Public Safety, King County, Washington is a large user of land mobile radio with licenses in VHF, UHF, 800 MHz, 2 GHz and 6 GHz bands. King County has nine communication sites and serves a population of 639,122 which encompasses approximately 1,900 square miles of unincorporated area in addition to supplying contract service to eight other cities. The Department employs approximately 600 commissioned officers, including reserves and an approximate civilian support staff of 250. In addition, the Department maintains a marine patrol with a seven vessel fleet and is the primary search and rescue resource in the county which consists of a major mountain range; numerous rivers and lakes. The Department is the third largest police agency in the State of Washington and the 17th largest county department in the United States.

We appreciate the fact that the FCC recognizes and is taking steps to alleviate the problems associated with the lack of mobile radio spectrum. However, we have serious concerns with portions of the docket that appears to create more problems for public safety organizations than they solve.

Only national defense is ranked higher in priority than public safety communications as established both by statute and court decision. We feel that many sections of this docket have the effect of reducing this priority and in many cases public safety communications appear to have become secondary to other users.

Our number one concern is the short term and fast track to comply with the proposed docket. Vendors are not manufacturing equipment that meets the bandwidth requirement of section 88.413 coupled with the fact that needed accessory equipment such as cavities, isolators, combiners, etc., are not manufactured and appear to be beyond the present manufacturing capabilities of vendors. Even if the equipment could be manufactured there is not enough time allowed for systems to be purchased, installed,



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and tested to determine if the new equipment and technology will meet the operational needs of public safety users.

The requirement of turning the transmitter modulation down January 1, 1996 will in effect create operational hardships to existing systems. Some manufacturing designs do not permit the reduction of the transmitter modulation to the level specified in section 88.413. Many of the current radio receivers do not have circuits that allow receiver bandwidths to be easily reduced. In fact most receivers have integrated designs that have been "optimized" for selectivity, sensitivity, desensitization, and intermod rejection. Arbitrarily reducing the modulation that the receiver hears will impact the total operating characteristics of the receiver, consequently, it may be impossible for these receivers to operate satisfactorily with reduced modulation. Present designs of transmitters and receivers could require extensive modification to meet the requirements of the docket or the needs of the users. The alternative would be the purchase of new equipment, (if available), to continue providing service to the taxpayers of our various jurisdictions.

Section 88.429 requires that transmitter power levels be reduced. Some transmitters presently manufactured cannot have the power reduced without creating spurious emissions. Wide area radio systems currently in operation would have to add more sites and transmitters to maintain the level of coverage they currently utilize. This requirement would necessitate the use of more frequencies and more sites which negates the spectrum efficiency the docket is attempting to develop. In addition the need for more sites will cause additional RF "clutter" in the form of intermod, adjacent channel interference, and on channel interference. Space between sites would become a large issue and a coordination nightmare due to the fact coordinators representing the various user blocks do not share the same data base.

The impact of the docket to our budget and the budgets of like agencies will be severe. The short time frame of changeover, the possible need for existing equipment modification in the short term, and complete equipment replacement in the long term, combined with the need for many more radio sites, will create a situation that many agencies will not be able to meet financially. This is a definite threat to public safety agencies being able to control their own radio systems. There is no room in the police, fire and emergency medical communications environment which allows for third party priorities, conflict arbitration, or cost/profit margins.

Our specific requests with regard to public safety and Docket 92-235 are:

1. Extend the total time involved to ensure manufacturers can manufacture equipment that will meet the requirements of the docket.

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- 2. Allow a period of time for testing equipment manufactured to meet Docket 92-235 to ensure it will meet the ever changing needs of the public safety environment.
- 3. Except for the trunking systems, reserve bands within the public safety band for police, fire, emergency medical services.
- 4. Address the issue of migration that allows for gradual changes to the new radio equipment and is more tolerant of dual operation of present and new equipment.
- 5. Ensure that required paging systems will work with the proposed modulation scheme.
- 6. Address the wide area coverage needs required by some public safety entities, both for local operations and mutual aid situations.
- 7. Protect the public safety band from third party and entrepreneur licensees.
- 8. Ensure the quality of public safety communications will not be sacrificed for the sake of spectrum efficiency.

In conclusion we feel that Docket 92-235 should recognize and make provisions for the unique needs of public safety service. The need for high quality and reliable communications needed to respond to the public in a rapid and efficient manner should not be compromised. Issues raised by this letter and various papers sent to you by APCO on behalf of public safety organizations in the United States must be addressed.

Sincerely,

JAMES E MONTGOMERY, SHERIFF-DIRECTOR

JEM:DS:JWB:rmh

cc: Chief Donna R. Nolan, Technical Services Division

ATTN: Captain John W. Beard, Communications Commander

Duncan Stewart, Radio Shop Manager